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10/798,562

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Juho Pirskanen

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EXAMINER

HOANG, THAI D

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/798,562	Applicant(s) PIRSKANEN ET AL.	
	Examiner THAI D. HOANG	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-22, 25 and 28-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-17, 20-22, 25, 28-43, 46-54 is/are rejected.
- 7) ☒ Claim(s) 18, 19, 44 and 45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 49-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification does not disclose any computer program embodied on a computer-readable medium as recited in new claims 49-50.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8-10, 12-13, 20-22, 25, 28-33, 35-39, 46-51, 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (hereafter Kim), US Pub. No. 2004/0131026 A1.

Regarding claims 1-3, 25, 29-30 and 49, Kim discloses a method for determining a transmission scheme for an Multimedia Broadcast/Multicast Service (MBMS) service in a mobile communication system, comprising:

providing a service to at least one user equipment; and determining if said service is to be provided to the at least one user equipment by a point to point connection or a point to multipoint connection, said determining step taking into account which of said at least one user equipment to which said service is providable is able to receive the service (a radio network controller (RNC), which provides an MBMS to at least one user equipment (UE) in the point-to-multipoint (PTM) or point-to-point (PTP) scheme based on a number of UE or total transmission power of a radio channel, p. [0020], [0027]-[0028] and [0043]-[0044].)

Regarding claims 4 and 31, Kim teaches that the determining step-comprises determining for the at least one user equipment if the at least one user equipment has another connection and determining that the respective at least one user equipment is not able to receive said service if the at least one user equipment has another connection (see fig. 9, when a user equipment leaves the cell, joins and receives service from another cell, p. [0010].)

Regarding claims 5 and 32, Kim discloses the determining step comprises determining a number of the at least one user equipment able to receive the service and comparing said determined number with a threshold value (the mobile communication system determining a type (PTP or PTM) of the transmission scheme by a number of

the at least one UE receiving the MBMS service within the cell, p. [0015], [0020], [0022], [0027], [0029], and [0052].)

Regarding claims 6 and 33, Kim discloses the determining step comprises determining whether a point to multipoint connection is used if the determined number is greater than the threshold value (if the number of UEs located in a corresponding cell is larger than or equal to the threshold, the Point to Multipoint (PTM) scheme is selected as a transmission scheme; p. [0022].)

Regarding claims 8 and 35, Kim discloses the step of suspending the service for the at least one user equipment if the respective at least one user equipment is unable to receive the service (UE1 suspends reception of a particular MBMS service from a particular cell, fig. 7, step 701, p. [0086].)

Regarding claims 9 and 36, Kim discloses the determining step comprises determining if the point to point or the point to multipoint connection is to be used (FIG. 7 illustrates a procedure for switching a transmission scheme from a PTM scheme to a PTP scheme, wherein UE1 suspends reception of a particular MBMS service from a particular cell, p. [0086]), when the at least one user equipment for which the service has been suspended is not taken into account (see p. [0086]-[0088].)

Regarding claims 10, 28 and 50, Kim discloses the method comprising the steps of:

activating a service which provides data to user equipment (fig. 7 steps 701-702, fig. 9, steps 901-903, p. [0086], [0098]-[0099]); and

suspending said service when said user equipment is unable to receive data of said service, wherein, said suspending comprises suspending said service if said user equipment has a different connection (if the UE moves to another cell, the MBMS service is suspended, p. [0086], [0100]).

Regarding claims 12 and 38, Kim discloses the step establishing a different connection with the user equipment and then determining if said user equipment is able to receive data of said service and to perform said suspending service if said user equipment is not able to receive data (since an UE can move between cells in the network, therefore, a new cell establishes a connection to provide MBMS service for the UE, and the old cell suspends the connection with the UE. See figs. 1, 3, 7 and 9, p. [0086], [0098] and [0100].)

Regarding claims 13 and 39, Kim discloses wherein the suspending step comprises sending a suspension message from the user equipment to a network element UE sends a message to the RNC, figs. 7 and 9, p. [0086], [0100].

Regarding claims 20 and 46, Kim discloses that the activating step-comprises activating the service that comprises a service in which data is provided to a user discontinuously (UE can join to and/or leave from MBMS service of a cell, see figs. 6, 7 and 9).

Regarding claims 21-22 and 47-48, Kim discloses the activating the service that comprises one of a multicast service and a broadcast service (p [0026]-[0028], [0043]-[0045].)

Art Unit: 2416

Regarding claim 37, Kim discloses the suspending step comprises suspending the service if said user equipment has a different connection (p. [0086] and [0100], UE suspends reception of a particular MBMS service from a particular cell to connect with another cell).

Regarding claims 51 and 53, Kim discloses the system comprising the steps of: activating a service which provides data to user equipment (fig. 9, steps 901-903);

suspending said service when said user equipment is unable to receive data of said service (leaving, fig. 9, steps 906-907); and

determining, after service suspension, if the user equipment receives the service again and to reactivate said service if the user equipment receives the service again (joining, fig. 9, steps 905-906 and 911-915.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 14-17, 34, 40-43, 52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim as shown above in view of Chang et al. (hereafter Chang), US Pub. No. 2003/0174678 B2.

Regarding claims 7, 14-15, 34, 40-41, 52 and 54, Kim does not disclose the suspending step comprises suspending charging for said service. However, Chang discloses a system and method for controlling packet data to provide multimedia broadcast/multicast services in a CDMA mobile communication system, wherein the system charges MBMS service to a user (see figs. 7 and 9, p. [0027] ad [0029].) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply billing method disclosed by Chang into Kim's system in order to accurately charging service to the user.

Regarding claims 16 and 42, Kim discloses wherein the suspending step comprises sending a suspension message from the user equipment to a network element UE sends a message to the RNC, fig. 7, p. [0086].

Regarding claims 17 and 43, Kim does not disclose the step of suspending charging performed by the network element, and the network element comprising a serving general packet radio service support node. However, Chang discloses the charging of the service is performed by a GGSN (see figs. 7 and 9, p. [0027] ad [0029]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply billing method disclosed by Chang into Kim's system in order to accurately charging service to the user.

Allowable Subject Matter

Claims 18-19 and 44-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 14-17 on pages 22-23 of the remarks have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed on 9/12/2008 with respect to claims 1, 10, 25, 28 and 49-50 have been fully considered but they are not persuasive.

Regarding claims 1, 25 and 49, on page 20 of the remarks, Applicants argued, *"Kim is silent as to considering the number of users in the measured cell actually able to receive the service. By taking into account a number of users able to receive a service rather than just counting the number of users in a cell, a more accurate number of users can be determined."* Examiner believes that the argument is not relevant because it is directed to subject matter, *"a number of users able to receive a service"*, not found in the claims.

Regarding claims 10, 28 and 50, Applicants argued, *"Just because a UE has moved to another cell, does not necessarily mean that it has a different connection. It is not disclosed in Kim that user equipment necessarily establishes a different connection when it moves out of the cell. Thus, Kim fails to disclose, or suggest, suspending the service to a user equipment which has a different connection."* Examiner respectfully disagrees. Every cell of the system disclosed by Kim has a node B (see figs 1, 3-4). Node B controls all UEs located in that cell. Therefore, when a UE moves out of a cell, in order to provide MBMS service continuously to the UE, a node B of an arriving cell has to establish a connection to provide MBMS service for the UE before the node B of the leaving cell disconnects with the UE.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THAI D. HOANG whose telephone number is (571)272-3184. The examiner can normally be reached on Monday-Friday 10:30am-19:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*/Thai D Hoang/
Primary Examiner, Art Unit 2416*